UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/623,209	07/18/2003	Yaron Elboim	ITL.0973US (P16173)	2849

7590 09/12/2005	**EXAMINER**
Timothy N. Trop	DALEY, CHRISTOPHER ANTHONY
TROP, PRUNER & HU, P.C.	

ART UNIT	PAPER NUMBER
2111	

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DATE MAILED: 09/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 July 2005*.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-26* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *21 July 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

1.   Claims 1 – 27 are pending.

Claim Rejections - 35 USC § 102

2.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by
> another filed in the United States before the invention by the applicant for patent or (2) a patent
> granted on an application for patent by another filed in the United States before the invention by the
> applicant for patent, except that an international application filed under the treaty defined in section
> 351(a) shall have the effects for purposes of this subsection of an application filed in the United States
> only if the international application designated the United States and was published under Article 21(2)
> of such treaty in the English language.

3.   Claims 1 – 27 are rejected under 35 U.S.C. 102(e) as being anticipated by Vila et

al (US6654824) herein after Vila.

4.   As to claims 1,7,13, and 21, Vila discloses a method, article, apparatus, and

system comprising:

A processor-based device (Vila teaches in figure 14 of a system comprising a

processor, deskew controller 62, that aligns signal timing that are derived from multi

channel links)

A bridge to direct data receiver from processor-based device (Vila teaches of a

controller as illustrated in figure 14, which inherently comprises a bridge mechanism to

couple the plurality of deskew buffers (61a- 61d) to said processor, COL 10, lines 28 –

41. Figure 3 also illustrates a bridge in the embodiment of a mux 33 that performs said function)

A storage coupled to the processor-based device storing instructions that if executed, enable the processor base device (Vila teaches of the deskew controller that inherently comprises a storage element that would facilitate the execution of deskewing steps of the (deskewing controller 62 of figure 14) as illustrated in figure 10)

delivering first data from a first position in a first serial buffer having a receiving end to receive the first data and a delivering end opposite the receiving end;(Vila teaches in figure 6 , first data in lane 0 that first serial buffer 54a of figure 5 and delivering said data to receiving end RCV 56a)

and delivering second data from a second position in a second serial buffer having a receiving end to receive the second data and a delivering end opposite the receiving end, (Vila teaches in figure 6 of delivering data from a second position, lane 1. The data is delivered on system illustrated in figure 5. Buffer 54b on serial transmission line 55b to receiving end, 56b. Vila further teaches of configuring the read and write pointers to indicate the location of the symbol or data being deskewed, which would comprise a second position, Col. 7, lines 18 – 40)

and the first position relative to the delivering end of the first serial buffer is different than the second position relative to the delivering end of the second serial buffer. (Vila teaches in figure 6 the difference in delivery time between lane0 and lane 1, with lane 1 data being one time cycle late in comparison to lane 0, thus illustrating the skew issue, COL. 6, lines 15 – 24).

As to claims 2 and 8, 14,and 23 Vila discloses the method, article, and apparatus, and

system including delivering the first data from the first position in the first serial buffer

having a number of elements that exceeds a maximum lane-to-lane skew. (Vila

teaches of having a threshold for the data buffer that flags the condition when the

maximum skew is exceeded, COL. 8, lines 1 – 7).

5.   As to claims 3, 9, 15,and 24, Vila discloses the method, article, apparatus, and

system including delivering the first data from the first position in the first serial buffer

having eight elements. (Vila teaches in figure 3 of a lane comprising of eight elements,

(0-7), COL. 4, lines 55 – 56).

6.   As to claims 4 and 10, and 25 Vila discloses the method, article, and apparatus

further including locating a first element in the first serial buffer and thereafter allowing X

B*E bits to proceed through the first serial buffer before delivering the first data, wherein

B equals a number of bits capable of being stored in an element, and E equals a

number of elements in the first serial buffer. (Vila teaches in figure 9 of having two

pointers, R, and W. Vila teaches of writing into buffer element by the B*E where buffer is

in the embodiment of a FIFO. The READ pointer would be set and triggered at the

appropriate time, COL. 7, lines 10 - 35).

7.   As to claims 5 and 11, 17, and 26 Vila discloses the method, article, and

apparatus, and system further including determining a location of a first element in the

first serial buffer, basing the first position on the location of the first element in the first

serial buffer, determining a location of a second element in the second serial buffer, and

basing the second position on the location of the second element in the second serial

buffer. (Vila teaches such assignment in COL. 4, lines 60 – 67, and figure 3).

8.   As to claims 6 and 12, 19, and 27, Vila discloses the method, article, apparatus,

and system further including locating a first element in the first serial buffer, and locating

a second element in the second serial buffer, independently. (Vila teaches that the data

stream may comprise of bits, which would make for independence of data origin, COL.

4, lines 55 – 56).

9.   As to claims 20,and 21, Vila discloses the apparatus of claim 13, wherein the

apparatus is an Ethernet controller and InfiniBand. (Vila teaches of supporting said

communication system, COL. Lines 30 – 44).

Response to Arguments

10.   Applicant's arguments filed July 18, 2005 have been fully considered but they are

not persuasive. With regards to the applicant's argument that reference Vila does not

teach delivering data from a different position in different buffers in order to deskew, the

examiner points to the teaching of Vila of supporting other embodiments, than the ones

illustrated in figure 13. Vila teaches of configuring the read and write pointers to indicate

the location of the symbol or data being deskewed, Col. 7, lines 18 – 40. In addition,

Vila teaches of embodiment, where the read pointer may be inhibited, or other storage elements may be used to perform the deskewing process, thus allowing the read pointer to be placed at a second position, Col. 10, lines 60 – 65.It would have been well known in the art at the time of the invention to exercise said design option to realize the invention.

Conclusion

11.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher A. Daley whose telephone number is 571 272 3625. The examiner can normally be reached on 9 am. - 4p m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rehana Perveen can be reached on 571 272 3676. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

PAUL R. MYERS
PRIMARY EXAMINER

CAD
9/04/2005